tufted or spreading growth. It was demonstrated how terminal growth is prevented on shrubs and trees exposed to much wind, while lateral twigs develop more fully, producing the one-sided effect seen in the woody plants on coasts or hills facing the sea.

The species observed most closely were Ammophila arenaria (Beach Grass or Arram Grass), Elymus arenarius (Sea Lyme Grass), Lupinus arboreus (Tree Lupine), Abronia latifolia (Yellow Sand Verbena), and Cupressus macrocarpus (Monterey cypress).

- February 28, 1914.—Leader, Miss Harriet Walker. Locality, Land's End, San Francisco. An observation of the permanent growth that can be found on the seaward cliffs was made. The grasses Ammophila (Beach-Grass) and Elymus (Wild Rye) and a sturdy Equisetum (Horsetail Rush) bind the shifting sand, and Salix lasiolepis (Arroyo Willow) is fixed on the banks. At this date Fragaria chilensis (Sand Strawberry), Sanicula arctopoides (Snake Root) and Dentaria integrifolia (Milkmaids) were in full bloom; while belated blossoms of last year's Grindelia (Gum Plant) and Eriophyllum staechadifolium (Lizard Tail) were to be seen.
- March 14, 1914.—Leader, Mrs. Guy Smith. San Bruno Hills were visited for the study of *Iris longipetala*. Hundreds of acres are covered with this species.
- March 28, 1914.—Leader, Mr. L. S. Smith. Locality, Mt. Tamalpais. Two characteristic associations were observed, the chaparral and the redwood floor. In the former two or three species of *Ceanothus* (Mountain Lilac) and *Arctostaphylos* were found in blossom; while along the trails and open spots many liliaceous plants and annuals were in flower. On the redwood slopes *Vancouveria* and *Oxalis oregona* were found.

## EXHIBITS.

## AUTUMN EXHIBIT OF NATIVE FLOWERING PLANTS.

From October 13 to 17, 1913, the Society held an exhibit of flowering plants at the Oakland Public Museum. A committee, of which Mr. Guy Smith of San Leandro acted as chairman, made a collection of about 300 species—219 in flower, and others in fruit. Most of them were taken from the Bay region, but some were sent from Plumas, El Dorado and Amador counties, the Yosemite, and the desert of San Bernardino County.

(Calendar of meetings, field trips and exhibits to be continued.)